APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,653	01/18/2002	William Ho Chang	FLEX 2399	4776

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EXAMINER
LETT, THOMAS J

ART UNIT	PAPER NUMBER
2625	

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE **3** MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *04 April 2006*.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-21* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-21* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on *18 January 2002* is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments with respect to claims 1-16 and 18-21 have been

considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-16, and 18-21 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Buckley et al (USPN 6,798,530 B1) in view of Jacobs (USPN

6,584,903 B2).

Regarding claim 1, Buckley discloses an output controller (processor 120 of Fig.

1, col. 7, lines 1-6) associated with an output device or output system (associated with

available printers, see at least col. 1, lines 41-46) for processing intermediate output

data that is received by the output controller from an information apparatus distinct from

the output controller and includes image data and has a first bit depth and resolution,

the image data corresponding to content that includes at least part of a text or graphics

information, the controller comprising:

means for receiving (printer driver memory portion 124 retrieves the currently

opened document, col. 7, lines 9-14) from the information apparatus,

means for retrieving (printer driver memory portion 124 retrieves the currently

opened document, col. 7, lines 9-14) the image data from the intermediate output data

(input PDLs, col. 2, lines 13-14) received from the information apparatus, and

means for carrying out an image processing operation (graphical user interface

10 of image editing application of Fig. 2) on the data, said image processing operation

utilizing, at least partly, parameters related to the output device or the output system

and adjusting at least one of bit depth, color space and a combination of resolution and

output size (virtual printer definition 430 includes various settings such as the graphic

resolution and paper size 450, col. 7, lines 35-46, and see Fig. 3) of an image

represented by the data.

Buckley et al does not disclose expressly an output controller that is distinct from

the information apparatus.

Jacobs discloses an output device that is distinct from an information apparatus

(col. 1, lines 53-57) and producing rasterized output based on rasterization parameters

associated with output devices (abstract). Lin et al and Jacobs are combinable because

they are from the same field of print rasterization.

At the time of the invention, it would have been obvious to a person of ordinary

skill in the art to provide an output device that is external to the host and to rasterize an

image based on a rasterization parameter. The motivation for doing so would have been

to allow using multiple independent printers and performing suitable and portable

rasterization for different printers (col. 1, lines 41-50).

With respect to claim 2, Buckley et al disclose a controller further comprising means for receiving the intermediate output data via a short-range wireless communication channel (each of the links of the system may be a wireless connection. col. 3, lines 45-49).

With respect to claim 3, Buckley et al disclose a controller in which the image data includes mixed raster content encoding, and the means for retrieving the image data from the intermediate output data comprises means for generating an output image data from at least part of the mixed raster content data (data of mixed raster content is processed, col. 9, lines 26-36).

With respect to claim 4, Buckley et al disclose a controller in which the means for carrying out image processing operations on the data, includes means for carrying out one or more of a color correction operation (halftone color adjustment 442), a color matching operation, a color management operation (color settings portion 520), a scaling operation (gray scale color rendering option 526), an interpolation operation, a color space conversion (see gamut settings portion 530 of Fig. 4), a decompression (decomposing mixed raster content, col. 9, lines 26-36), a decryption, and a halftoning operation (continuous tone halftone rendering option 512).

With respect to claim 5, Buckley et al disclose a controller of claim 1 in which the first bit depth and resolution correspond to a predefined standard value included in the controller (default rendering can be used, col. 8, lines 7-13).

With respect to claim 6, Buckley et al disclose a controller of claim 1 in which the means for carrying out an image processing operation on the data adjusts at least one

of bit depth, color space, and a combination of output size and resolution to a value

corresponding to a specific input requirement of an output engine (default rendering can

be used, col. 8, lines 7-13).

With respect to claim 7, Buckley et al disclose a controller of claim 1 in which the

output controller is included in the output device (the devices shown in Fig. 2 can be

separate or constructed as one integrated device, col. 6, lines 4-9).

With respect to claim 8, Buckley et al disclose a controller of claim 1 in which the

output controller is included in one of a server, an external station, a board, a card, and

a data access point (the devices shown in Fig. 2 can be separate or constructed as one

integrated device, col. 6, lines 4-9).

With respect to claim 9, Buckley et al disclose a controller of claim 1, further

comprising means for storing one or more output device profiles (a default rendering

profile can be used for any virtual printer, col. 8, lines 10-13).

With respect to claim 10, Buckley et al disclose an output controller method for

processing intermediate output data that includes image data and having a first bit

depth and resolution, the image data corresponding to content that includes at least part

of a text or graphics information, the method comprising:

retrieving the image data from the intermediate output data (using graphical user

interface 10 of image editing application of Fig. 2), and

carrying out an image processing operation on the data, said image processing

operation adjusting at least one of bit depth (see "Quad Dot" selection of Fig. 2), color

space (see gamut settings portion 530 of Fig. 4) and a combination of resolution and

output size of an image represented by the data (virtual printer definition 430 includes

various settings such as the graphic resolution and paper size 450, col. 7, lines 35-46,

and see Fig. 3).

Buckley et al does not disclose expressly an output controller that is distinct from

the information apparatus.

Jacobs discloses an output device that is distinct from an information apparatus

(col. 1, lines 53-57) and producing rasterized output based on rasterization parameters

associated with output devices (abstract). Lin et al and Jacobs are combinable because

they are from the same field of print rasterization.

At the time of the invention, it would have been obvious to a person of ordinary

skill in the art to provide an output device that is external to the host and to rasterize an

image based on a rasterization parameter. The motivation for doing so would have been

to allow using multiple independent printers and performing suitable and portable

rasterization for different printers (col. 1, lines 41-50).

With respect to claim 11, Buckley et al disclose a controller method of claim 10

further comprising receiving the intermediate output data via a short-range wireless

communication channel (each of the links of the system may be a wireless connection.

col. 3, lines 45-49).

With respect to claim 12, Buckley et al disclose a controller method of claim 10 in

which the image data includes data encoded with mixed raster content (data of mixed

raster content is processed, col. 9, lines 26-36).

With respect to claim 13, Buckley et al disclose a controller method of claim 10 wherein the step of carrying out an image processing operation on the data, includes carrying out one or more of a color correction operation, a color matching operation, a color management operation, a scaling operation, an interpolation operation, a color space conversion, a halftoning operation, a compression operation, a decompression operation, and a decryption operation.

With respect to claim 14, Buckley et al disclose a computer readable medium, data output controller software for processing intermediate output data that includes image data and has a first bit depth, and resolution, the image data corresponding to content that includes text or graphics information, the controller software comprising: software for retrieving the image data from the intermediate output data, and software for carrying out an image processing operation on the data, said image processing operation adjusting at least one of bit depth, color space and a combination of resolution and output size of an image represented by the data.

Buckley et al does not disclose expressly an output controller that is distinct from the information apparatus.

Jacobs discloses an output device that is distinct from an information apparatus (col. 1, lines 53-57) and producing rasterized output based on rasterization parameters associated with output devices (abstract). Lin et al and Jacobs are combinable because they are from the same field of print rasterization.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide an output device that is external to the host and to rasterize an

image based on a rasterization parameter. The motivation for doing so would have been

to allow using multiple independent printers and performing suitable and portable

rasterization for different printers (col. 1, lines 41-50).

With respect to claim 15, Buckley et al disclose a medium of claim 14 further

comprising software for establishing a short-range wireless communicating channel with

an information apparatus (each of the links of the system may be a wireless connection.

col. 3, lines 45-49).

With respect to claim 16, Buckley et al disclose a medium of claim 15 further

comprising software for providing an output device profile over the communication

channel (a default rendering profile can be used for any virtual printer, col. 8, lines 10-

13).

With respect to claim 18, Buckley et al disclose a medium of claim 14 wherein

the software includes software for retrieving the image data from data encoded with

mixed raster content (data of mixed raster content is processed, col. 9, lines 26-36).

With respect to claim 19, Buckley et al disclose a medium of claim 14 wherein

the software for carrying out an image processing operation on the data includes

software for carrying out one or more of a color correction operation (halftone color

adjustment 442), a color matching operation, a color management operation (color

settings portion 520), a scaling operation (gray scale color rendering option 526), an

interpolation operation, a color space conversion (see gamut settings portion 530 of Fig.

4), a decompression (decomposing mixed raster content, col. 9, lines 26-36), a

decryption, and a halftoning operation (continuous tone halftone rendering option 512).

With respect to claim 20, Buckley et al disclose a medium of claim 14 in which

the first bit depth and resolution correspond to respective values that are included in

said software for retrieving image data and carrying out image processing operations

(default rendering can be used, col. 8, lines 7-13).

With respect to claim 21, Buckley et al disclose a medium of claim 14 in which

the output controller software is included in a server, an external station, a board, and a

data access point (the devices shown in Fig. 2 can be separate or constructed as one

integrated device, col. 6, lines 4-9).

3.   Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buckley

et al (USPN 6,798,530 B1) in view of Hitachi Koki Imaging Solutions, Inc. (HiKIS) (Office

World News, "i-copiers and i-printers give dealers the right connections", Ft.

Lauderdale: Oct 2000. Vol. 28, Issue 10; p. 30).

Buckley et al does not disclose expressly a medium of claim 14 further

comprising software for calculating and collecting payment information as compensation

for rendering of the content by the output device.

HiKIS teaches of a network printer that uses a billing module "I-billing" for

calculating and billing for customers of the image processing system. Buckley et al and

HiKIS are analogous art because they are from the similar problem solving area of

customer billing. At the time of the invention, it would have been obvious to a person of

ordinary skill in the art to add the software billing feature of HiKIS to the system of

Buckley et al in order to obtain software to bill customers using image output devices.

The motivation for doing so would be to effectively bill customers.

Conclusion

Applicant's amendment necessitated the new grounds of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Thomas J. Lett whose telephone number is (571) 272-

7464. The examiner can normally be reached on 7-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David K. Moore can be reached on (571) 272-7437. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TJL

KING Y. POON
PRIMARY EXAMINER